AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended): A method of diagnosing, tracking a progression of, and/or determining the prognosis of a human or other mammal with a cancer said method comprising determining a level or presence of an angiocidin fragment, wherein angiocidin is a molecule selected from the group consisting of a molecule whose amino acid sequence is SEQ ID NO:1, a molecule whose amino acid sequence is SEQ ID NO:2, and a molecule that binds to the CSVTCG (SEQ ID NO: 3) peptide domain of thrombospondin and has a measured molecular weight of about 50 kD when subjected to an SDS-PAGE under non-reducing conditions.

2. (Original): The method of claim 1, further comprising comparing the level of said angiocidin fragment against known values for healthy persons and/or against known values for metastatic or nonmetastatic tumors.

3. (Original): The method of claim 1, wherein the purified angiocidin fragment is not less than four amino acid residues in length and not more than 376 amino acid residues in length.

4. (Original): The method of claim 3, wherein the purified angiocidin fragment is not less than four amino acid residues in length and not more than 373 amino acid residues in length.

5. (Original): The method of claim 4, wherein the purified angiocidin fragment is not less than four amino acid residues in length and not more than 340 amino acid residues in length.

6. (Original): The method of claim 5, wherein the purified angiocidin fragment is not less than

four amino acid residues in length and not more than 300 amino acid residues in length.

7. (Original): The method of claim 6, wherein the purified angiocidin fragment is not less than four amino acid residues in length and not more than 250 amino acid residues in length.

8. (Original): The method of claim 7, wherein the purified angiocidin fragment is not less than four amino acid residues in length and not more than 200 amino acid residues in length.

9. (Original): The method of claim 8, wherein the purified angiocidin fragment is not less than four amino acid residues in length and not more than 150 amino acid residues in length.

10. (Original): The method of claim 9, wherein the purified angiocidin fragment is not less than four amino acid residues in length and not more than 100 amino acid residues in length.

11. (Original): The method of claim 10, wherein the purified angiocidin fragment is not less than four amino acid residues in length and not more than 50 amino acid residues in length.

12. (Original): The method of claim 11, wherein the purified angiocidin fragment is not less than four amino acid residues in length and not more than 25 amino acid residues in length.

13. (Original): The method of claim 1, wherein the level of the angiocidin fragment is analyzed from a sample of bodily fluid or from a biopsy.

14. (Original): The method of claim 13, wherein the bodily fluid is selected from the group consisting of blood, blood plasma, serum, lymph, cerebrospinal fluid, ascites fluid, urine, a lavage fluid, blister fluid, tears, saliva, a secretion, a mucous fluid, bile, milk, an aspirate, and a cyst fluid.

15. (Original): The method of claim 13, wherein analysis of the biopsy comprises a step selected

from the group of immunohistochemical staining, immunofluorescent staining, immune staining, nonimmune staining, and an assay of the biopsy or an extract thereof.

16. (Cancel)

17. (Cancel)

18. (Cancel)

19. (Cancel)

20. (Cancel)

21. (Cancel)

22. (Cancel)

23. (Cancel)

24. (Cancel)

25. (Cancel)

26. (Cancel)

27. (Cancel)

28. (Cancel)

29. (Cancel)

30. (Cancel)

31. (Cancel)

32. (Original): A method of detecting a presence and/or a clinical course of a neoplastic disease by assaying a bodily fluid from an individual, wherein the method comprises the steps of:

(1) measuring the individual's bodily fluid level of an angiocidin fragment;

(2) utilizing the result of step (1) in a diagnosis as to whether the individual has a neoplastic disease and/or whether a known neoplastic disease has progressed, regressed, or remained stable.

33. (Original): The method of claim 32, wherein the bodily fluid is selected from the group consisting of blood, blood plasma, serum, lymph, cerebrospinal fluid, ascites fluid, urine, a lavage fluid, blister fluid, tears, saliva, a secretion, a mucous fluid, bile, milk, an aspirate, and a cyst fluid.

34. (Original): The method of claim 32, wherein the neoplastic disease is selected from the group consisting of an adenoma, an adenocarcinoma, a carcinoma, a lymphoma, a leukemia, a skin cancer, a sarcoma, and an internal cancer.

35. (Original): The method of claim 32, wherein the individual referred to therein is a first individual and wherein the method further comprises the steps of:

(3) measuring a second individual's level of the angiocidin fragment in the same type of bodily fluid utilized for step (1), said second individual considered to not have neoplastic disease; and

(4) utilizing the result of step (3) in the diagnosis of whether the first individual has a neoplastic disease.

36. (Original): The method of claim 32, wherein the first individual's angiocidin fragment level exceeds the angiocidin fragment level of the second individual, and this difference is used to conclude that it is more likely that the diagnosis will be that the first individual has a neoplastic disease and/or a neoplastic disease more advanced than that of the second individual.

37. (Original): The method of claim 32, further comprising the steps of assaying the individual's bodily fluid level for an angiocidin fragment more than once, and considering utilizing a change in bodily fluid level from an older to a more recent value to indicate appearance or progression or improvement, wherein said appearance, progression or improvement is indicated by an increase in the level of said angiocidin fragment and said improvement is indicated by a decrease in said level.

38. (Original): The method of claim 37, wherein the bodily fluid level of an angiocidin fragment is assayed on 2 or more days.

39. (Original): The method of claim 37, wherein the bodily fluid level of an angiocidin fragment is assayed on 3 or more days spaced at regular intervals, said intervals ranging from two weeks to ten years.

40. (Original): The method of claim 32, wherein the neoplastic disease is selected from the group consisting of an adenoma, an adenocarcinoma, a carcinoma, a lymphoma, a leukemia, a skin cancer, a sarcoma, and an internal cancer.

41. (Original): The method of claim 32, wherein the neoplastic disease is an internal cancer.

42. (Original): The method of claim 32, wherein the neoplastic disease is selected from the group consisting of a cancer of the respiratory system, a cancer of the circulatory system, a cancer of the musculoskeletal system, a cancer of a muscle, a cancer of a bone, a cancer of a joint, a cancer

of a tendon and/or ligament, a cancer of a connective tissue, a cancer of the digestive system, a cancer of the liver and/or biliary system, a cancer of the pancreas, a cancer of the head, a cancer of the neck, a cancer of the endocrine system, a cancer of the reproductive system, a cancer of the male reproductive system, a cancer of the female reproductive system, a cancer of the genitourinary system, a cancer of a kidney, a cancer of the urinary tract, a skin cancer, a cancer of another sensory organ, a cancer of the nervous system, a cancer of a lymphoid organ, a blood cancer, a cancer of a gland, a cancer of a mammary gland, a cancer of a prostate gland, a cancer of endometrial tissue, a cancer of mesodermal tissue, a cancer of ectodermal tissue, cancer of an endodermal tissue, a teratoma, a poorly-differentiated cancer, a well-differentiated cancer, and a moderately differentiated cancer.

43. (Original): The method of claim 32, wherein the neoplastic disease is selected from the group consisting of a cancer of solid tissue, a cancer of the blood or the lymphatic system, a solid cancer, a liquid cancer, a non-metastatic cancer, a premetastic cancer, a metastatic cancer, a cancer with vascular invasion, a skin cancer, a poorly differentiated cancer, a well- differentiated cancer and a moderately differentiated cancer.

44. (Original): The method of claim 32, wherein the measurement of an angiocidin fragment level comprises a use of a binding agent, said binding agent being capable of binding said fragment.

45. (Original): The method of claim 44, wherein said method comprises the use of a first binding agent, said first binding agent capable of binding angiocidin but not the angiocidin fragment, and further comprises a second binding agent, said binding agent capable of binding angiocidin and capable of binding the angiocidin fragment.

46. (Original): The method of claim 44, wherein said binding agent comprises a protein and/or a polypeptide.

47. (Original): The method of claim 44, wherein said binding agent comprises an antibody or another molecule that crossreacts with or binds to an angiocidin fragment.

48. (Original): The method of claim 47, wherein said antibody is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, and single-chain antibody.

49. (Original): The method of claim 46, wherein said protein comprises an antibody fragment.

50. (Original): The method of claim 47, wherein said binding agent comprises a non-protein.

51. (Original): The method of claim 46, wherein said protein and/or polypeptide is derived from a phage display library.

52. (Original): The method of claim 44, wherein said binding agent is selected from the group consisting of an aptamer, a DNA, an RNA, a modified DNA, a modified RNA, a carbohydrate, a glycosaminoglycan, a heparin, a glycoprotein, a proteoglycan, and combinations and derivatives thereof.

53. (Original): A method of claim 44, wherein said binding agent comprises a ligand that binds an angiocidin fragment and another molecule, where said molecule contains an epitope that is present in an angiocidin fragment and/or aggregate in a sample.

54. (Original): The method of claim 53, wherein said ligand is selected from the group consisting of a thrombospondin, a thrombospondin fragment that binds angiocidin, a molecule comprising a thrombospondin fragment sequence that binds angiocidin, and a molecule comprising the amino acid sequence CSVTCG (SEQ ID NO:3).

55. (Original): The method of claim 32, wherein said measuring the individual's bodily fluid level of an angiocidin fragment or fragments further comprises the use of an angiocidin fragment

as a standard.

56. (Original): The method of claim 55, wherein said angiocidin fragment used as a standard is selected from the group consisting of a recombinant angiocidin fragment, a purified angiocidin fragment that occurs in a bodily fluid, a purified angiocidin fragment that occurs in a mixture with other angiocidin fragments, a partially purified angiocidin fragment, a synthetic angiocidin fragment, and an angiocidin fragment that contains an epitope that is present in an angiocidin fragment in a sample from a cancer patient.

57. (Currently Amended): The method of claim 44, wherein the angiocidin fragment is separated from angiocidin before said angiocidin fragment is bound to the binding agent, wherein angiocidin is a molecule selected from the group consisting of a molecule whose amino acid sequence is SEQ ID NO:1, a molecule whose amino acid sequence is SEQ ID NO:2, and a molecule that binds to the CSVTCG (SEQ ID NO: 3) peptide domain of thrombospondin and has a measured molecular weight of about 50 kD when subjected to an SDS-PAGE under non-reducing conditions.

58. (Cancel)

59. (Cancel)

60. (Cancel)

61. (Cancel)

62. (Cancel)

63. (Cancel)

64. (Cancel)

65. (Cancel)

66. (Cancel)

67. (Cancel)

68. (Cancel)

69. (Cancel)

70. (Cancel)

71. (Cancel)

72. (Cancel)

73. (Cancel)

74. (Cancel)

75. (Cancel)

76. (Cancel)

77. (Cancel)

78. (Cancel)

79. (Cancel)

80. (Cancel)

81. (Cancel)

82. (Cancel)

83. (Cancel)

84. (Cancel)

85. (Cancel)

86. (Cancel)

87. (Cancel)

88. (Cancel)

89. (Cancel)

90. (Cancel)

91. (Cancel)

92. (Cancel)

93. (Cancel)

94. (Cancel)

95. (Cancel)

96. (Cancel)

97. (Cancel)

98. (Cancel)

99. (Cancel)

100. (Cancel)

101. (Cancel)

102. (Cancel)

103. (Cancel)

104. (Cancel)

105. (Cancel)

106. (Cancel)

107. (Cancel)

108. (Cancel)

109. (Cancel)

110. (Currently Amended): A method of diagnosing, tracking a progression of, and/or determining the prognosis of a human or other mammal with a disease or condition said method comprising determining a level or presence of an angiocidin fragment, wherein angiocidin is a molecule selected from the group consisting of a molecule whose amino acid sequence is SEQ ID NO:1, a molecule whose amino acid sequence is SEQ ID NO:2, and a molecule that binds to the CSVTCG (SEQ ID NO: 3) peptide domain of thrombospondin and has a measured molecular weight of about 50 kD when subjected to an SDS-PAGE under non-reducing conditions.

111. (Original): The method of claim 110, wherein the disease or condition is a disease.

112. (Original): The method of claim 110, wherein the disease or condition is a condition.

113. (Original): A method of detecting a presence and/or a clinical course of a neoplastic disease by assaying a bodily fluid from an individual, wherein the method comprises the steps of:

(1) measuring the individual's bodily fluid level of an angiocidin fragment epitope;

(2) utilizing the result of step (1) in a diagnosis as to whether the individual has a neoplastic disease and/or whether a known neoplastic disease has progressed, regressed, or remained stable.

114. (Original): The method of claim 113, wherein the individual referred to therein is a first individual and wherein the method further comprises the steps of:

(3) measuring a second individual's level of the angiocidin fragment epitope in the same type of bodily fluid utilized for step (1), said second individual considered to not have neoplastic disease; and

(4) utilizing the result of step (3) in the diagnosis of whether the first individual has a neoplastic disease.